

CLAIMS

1. A method of transmitting a packet data to which a sync pattern is added before transmission, said method comprising the steps of:

(a) generating a fixed pattern comprising 'm' words ('m' is an integer greater than 0);

(b) generating plural types of variable patters, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating a sync pattern comprising 'q' words ('q' = m + n) formed by combining the fixed pattern and the variable pattern;

(d) controlling said step (c) for making a bit structure included in at least two consecutive packets include different types of variable patterns.

2. The method as defined in Claim 1, wherein the variable pattern comprises a plurality of words, and the plural types of variable patterns are made by changing an order of the words.

3. The method as defined in Claim 1, wherein the fixed pattern comprises three words.

4. The method as defined in Claim 3, wherein the three words includes 'eb', 'cb' and 'aa', expressed in a hexadecimal notation.

5. The method as defined in Claim 1, wherein the variable pattern comprises five words.

6. The method as defined in Claim 5, wherein the five words

includes '4c', 'ea', 'cd', '7a' and '81', expressed in a hexadecimal notation.

7. The method as defined in Claim 1, wherein the plural types of variable patterns are '4ceacd7a81' and 'cd7aea814c' expressed in a hexadecimal notation.

8. The method as defined in Claim 1, wherein the packet data is a digital video signal.

9. The method as defined in Claim 7, wherein the digital video signal is a compressed signal.

10. The method as defined in Claim 8, wherein the compressed signal is a DIF stream.

11. The method as defined in Claim 1, wherein the packet data is transmitted through an ATM transmission line.

12. A method of receiving a packet data transmitted by the method defined in Claim 1, said method including a step of detecting a sync.

13. A method of receiving a packet data transmitted by the method defined in Claim 1, said method including the steps of:

(a) detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and

(b) securing a sync for examining only the fixed pattern, wherein said step (a) processes the data until the sync is secured,

and said step (b) processes the data after the sync is secured.

14. A packet data transmitting apparatus for adding a sync pattern to a packet data before transmitting the data, said transmitting apparatus comprising:

(a) means for generating a fixed pattern comprising 'm' words ('m' is an integer greater than 0);

(b) means for generating plural types of variable patterns, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) means for generating a sync pattern comprising 'q' words ('q' = m + n) formed by combining the fixed pattern and the variable pattern; and

(d) means for controlling said means defined in (c) for making a bit structure included in at least two consecutive packets include different types of variable patterns.

~~15. A packet data receiving apparatus for receiving the packet data transmitted by the method defined in Claim 1, said receiving method comprising:~~

~~(a) means for detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and~~

~~(b) means for securing a sync for examining only the fixed pattern,~~

~~wherein said means defined in (a) processes the data until the sync is secured, and said means defined in (b) processes the data after the sync is secured.~~

16. A method as defined in Claim 1, wherein the packet data

adding a transmission header of ' $s \times k$ ' words (k is a natural number),

5 wherein the transmission header is divided into 'k' pieces of blocks at intervals of every 's' words, each block includes the fixed pattern of 'm' words at a top thereof, the fixed pattern employs a pattern other than patterns used in the block header.